



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2024-2021; Project Identifier AD-2023-01077-T; Amendment 39-22905; AD 2024-25-03]

RIN 2120-AA64

Airworthiness Directives; Gulfstream Aerospace Corporation Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Gulfstream Aerospace Corporation Model GVII-G500 and GVII-G600 airplanes. This AD was prompted by a report of cracking in the electrical grounding receptacles located on the left and right wings. This AD requires inspecting the electrical grounding receptacles for cracks and corrosion, performing applicable on-condition actions, and sealing over the grounding receptacles on the top of the wings to permanently disable the receptacle. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-2021; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule,

any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For Gulfstream material identified in this AD, contact Gulfstream Aerospace Corporation, Technical Publications Dept., P.O. Box 2206, Savannah, GA 31402-2206; telephone 800-810-4853; email pubs@gulfstream.com; website gulfstream.com/en/customer-support.

- You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at regulations.gov under Docket No. FAA-2024-2021.

FOR FURTHER INFORMATION CONTACT: Brandon Ellis, Aviation Safety Engineer, FAA, 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5535; email: 9-ASO-ATLACO-ADs@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Gulfstream Aerospace Corporation Model GVII-G500 and GVII-G600 airplanes. The NPRM published in the *Federal Register* on August 22, 2024 (89 FR 67913). The NPRM was prompted by a report of cracking in the electrical grounding receptacles located on the left and right wings. In the NPRM, the FAA proposed to require inspecting the electrical grounding receptacles for cracks and corrosion, performing applicable on-condition actions, and sealing over the grounding receptacles on the top of the wings to permanently disable the receptacle. The FAA is issuing this AD to address cracks and corrosion of the electrical grounding

receptacles. The unsafe condition, if not addressed, could result in fuel leaking from the electrical grounding receptacles.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from an individual and three anonymous commenters who supported the NPRM without change.

Conclusion

The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. Except for minor editorial changes, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Material Incorporated by Reference under 1 CFR Part 51

The FAA reviewed Gulfstream GVII-G500 Customer Bulletin No. 089, dated November 28, 2023; and Gulfstream GVII-G600 Customer Bulletin No. 058, dated November 28, 2023. This material specifies procedures for the following actions:

- Borescope inspections for cracking and corrosion of the interior walls of the grounding receptacle casing.
- Measurement of the inner diameter of the grounding receptacle if any Level 1 corrosion is found.
- Repair including cleaning and application of chemical conversion coating if any Level 1 corrosion within the specified tolerance (inner diameter) is found.
- Replacement of the grounding receptacle assembly if any crack, any Level 2 or Level 3 corrosion, or any Level 1 corrosion outside of the specified tolerance is found.

- Removal of the “GROUND HERE” decal/stencil from the grounding receptacles, and application of epoxy over the ground receptacle area to permanently disable the receptacles.

These documents are distinct since they apply to different airplane models.

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 236 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspecting and disabling grounding receptacles	64 work-hours X \$85 per hour = \$5,440	\$83	\$5,523	\$1,303,428

The FAA estimates the following costs to do any necessary corrective actions that would be required based on the results of the inspections. The agency has no way of determining the number of aircraft that might need these actions:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Repair	12 work-hours X \$85 per hour = \$1,020	\$83	\$1,103
Replacement	35 work-hours X \$85 per hour = \$2,975	\$926	\$3,901

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some or all the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2024-25-03 Gulfstream Aerospace Corporation: Amendment 39-22905; Docket No. FAA-2024-2021; Project Identifier AD-2023-01077-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Gulfstream Aerospace Corporation airplanes, certificated in any category, identified in paragraphs (c)(1) and (2) of this AD.

(1) Model GVII-G500 airplanes, having serial numbers (S/Ns) 72001 through 72139 inclusive.

(2) Model GVII-G600 airplanes, having S/Ns 73001 through 73144 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 28, Fuel.

(e) Unsafe Condition

This AD was prompted by a report of cracking in the electrical receptacles located on left and right wings of certain Gulfstream Aerospace Corporation Model GVII airplanes. The FAA is issuing this AD to address cracks and corrosion of the electrical grounding receptacles. The unsafe condition, if not addressed, could result in fuel leaking from the electrical grounding receptacles.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

Within 36 months after the effective date of this AD, do the actions specified in paragraphs (g)(1) and (2) of this AD, in accordance with Gulfstream GVII-G500 Customer Bulletin No. 089 or Gulfstream GVII-G600 Customer Bulletin No. 058, both dated November 28, 2023, as applicable.

(1) Do borescope inspections for cracking and corrosion of the interior walls of the grounding receptacle casing and do all applicable corrective actions before further flight.

(2) Remove the “GROUND HERE” decal/stencil from the grounding receptacles and apply epoxy over the ground receptacle area to permanently disable the grounding receptacles.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, East Certification Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (i) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(3) For material that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (h)(3)(i) and (ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled “RC Exempt,” then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator’s maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(i) Related Information

For more information about this AD, contact Brandon Ellis, Aviation Safety Engineer, FAA, 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5535; email: 9-ASO-ATLACO-ADs@faa.gov.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Gulfstream GVII-G500 Customer Bulletin No. 089, dated November 28, 2023.

(ii) Gulfstream GVII-G600 Customer Bulletin No. 058, dated November 28, 2023.

(3) For Gulfstream material identified in this AD, contact Gulfstream Aerospace Corporation, Technical Publications Dept., P.O. Box 2206, Savannah, GA 31402-2206; telephone 800-810-4853; email pubs@gulfstream.com; website gulfstream.com/en/customer-support.

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

Issued on December 4, 2024.

Victor Wicklund,
Deputy Director, Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2025-00138 Filed: 1/7/2025 8:45 am; Publication Date: 1/8/2025]